

WHAT IS CLAIMED IS:

1. A method of producing cumene hydroperoxide by continuous aqueous-emulsion oxidation in a series of oxidation, wherein the process is conducted in the presence of a mixture of an aqueous solution of an ammonium salt with a concentration of 0.001 - 0.5 mass % and an aqueous solution of ammonia with a concentration of 0.001 - 0.5 mass %, which mixture is fed into each oxidation reactor in an ammonia : ammonium salt mass ratio of between 1:100 to 100:1.

2. A method according to Claim 1, wherein the process is conducted at a temperature of 100 - 120°C in the first oxidation reactor with a gradual decrease to 80 - 90°C in the last oxidation reactor and at a gage pressure of up to 5 atm.

3. The method according to Claim 1, wherein the ammonium salt is formed by reacting carbon dioxide with ammonia in the presence of an aqueous feed stream for one of the oxidation reactors.